

REMARKS

The Office action has been carefully considered. The Office action rejected claims 1-29 under 35 U.S.C. § 102(e) as being anticipated by U.S. Patent No. 6,266,681 to Guthrie ("Guthrie"). Applicants respectfully disagree.

By present amendment, claim 25 has been amended for clarification and not in view of the prior art and/or for purposes related to patentability. Applicants submit that the claims as filed were patentable over the prior art of record, and that the amendments herein are for purposes of clarifying the claims and/or for expediting allowance of the claims, and not for reasons related to patentability. Reconsideration is respectfully requested.

Applicants thank the Examiner for the interview held (by telephone) on January 22, 2004. During the interview, the Examiner and applicants' attorney discussed the claims with respect to the prior art. The essence of applicants' position is incorporated in the remarks below.

Prior to discussing reasons why applicants believe that the claims in this application are clearly allowable in view of the teachings of the cited and applied reference, a brief description of the present invention is presented.

The present invention is directed, generally, to a method for handling DHTML (Dynamic HyperText Markup Language) behaviors in web pages. A DHTML behavior is typically characterized as a component associated with an element in a web page, wherein the component encapsulates some additional functionality or "behavior". For example, an element, such as JPEG picture of a balloon, may have an associated DHTML behavior that causes the balloon to move

upward in the web page when the JPEG picture is clicked. As such, when applied to a standard HTML element on a page, a DHTML behavior component enhances that element's default behavior.

In the past, a DHTML behavior was merely attached to the respective element. That is, the code representing the behavior was separate (but still associated) with the code representing the element. As such, when a web page was accessed by a browser and subsequently interpreted (element by element), the behavior was not interpreted until instantiated in order to save time and computing power. That is, the behavior component remained attached to an associated element but not executed until some behavior activation condition was met, *i.e.*, left-clicking in the above example.

According to an embodiment of the present invention, however, the DHTML behavior is bound to an associated element. That is, the code representing the behavior is intermixed with the code representing the element. As such, when a web page is accessed by a browser and subsequently interpreted (again element by element), the behavior is instantiated prior to the interpretation of the associated element. Put another way, because the behavior component is bound to the element, the behavior component is interpreted before the element is interpreted so that the element may be presented properly when displayed. Note that the above description is for example and informational purposes only, and should not be used to interpret the claims, which are discussed below.

Turning to the claims, independent claim 1 recites a method comprising interpreting a page, the page having an import instruction that references a

behavior component and an element linked to the behavior component, and determining a behavior of the element on the page by instantiating the behavior component in accordance with the import instruction prior to interpreting the element. The Office action rejected claim 1 as being anticipated by Guthrie. Column 5, lines 14-18, 26-29 and 33-34 have been referenced. Applicants respectfully disagree that Guthrie discloses the recitations of claim 1.

Guthrie teaches, generally, a method and system for injecting code into a web document prior to interpretation. More specifically, the cited and applied portion of Guthrie discloses an injector system operable to inject code into an HTML document. When an HTML document is requested by a browser, the injector system “intercepts” the returning HTML document, injects some code into the HTML document in the form of an injectable component, and then passes the modified HTML document to the browser for interpretation in a normal manner. See, generally column 5, lines 13-34. As such, the browser is unaware (i.e., the injection is transparent to the browser) of any change to the HTML document and interprets the modified HTML document according to known conventional methods regardless of what code may have been injected.

Guthrie does not disclose a behavior bound to an element as claimed by applicants. Moreover, the system and method in Guthrie is neither concerned nor aware of the nature of the injectable component. In fact, the method of the present invention may be practiced in succession to the methods taught by Guthrie. Guthrie does not teach or even suggest the manner of how to interpret the modified HTML document once passed to the browser since the injection method is

transparent to the browser. Therefore the modified HTML document will still be interpreted like any other HTML document. That is, each element will be interpreted element by element and any attached behavior component will only be interpreted when activated.

Relating the above argument to the recitations of claim 1, Guthrie does not teach or even suggest interpreting a page wherein the page comprises an import instruction that references a behavior component and an element linked to the behavior component. Guthrie teaches injectable components in a general manner but falls short of teaching a particular kind of component called a behavior component linked to an element. Even if Guthrie were to be construed as teaching conventional behavior components that are attached to elements, Guthrie cannot possibly be construed to teach behavior components that are linked to an element. Furthermore, because Guthrie teaches a system and method that is transparent to the browser, Guthrie cannot possibly be construed to teach determining a behavior of the element on the page by instantiating the behavior component in accordance with the import instruction prior to interpreting the element. Therefore, applicants submit that claim 1 is allowable over the prior art of record for at least these reasons.

With regard to claims 2-17, these claims depend either directly or indirectly from claim 1. Applicants submit that claims 2-17 are also allowable for the additional patentable elements included in these claims.

As one example, claim 9 recites that the behavior component comprises content, and wherein instantiating the behavior component comprises inserting the

content into the page. Guthrie cannot possibly be construed to teach a behavior component that, when instantiated, inserts code. In effect, to read on claim 9, Guthrie would have to disclose that its injectable component was in turn a component itself for injecting additional code (or content). It is counterintuitive to the system of Guthrie to inject code operable to inject more code. Applicants submit that for at least this additional reason, claim 9 is allowable over the prior art of record.

Claim 18 recites a computer-readable medium having computer-executable instructions comprising interpreting a page to create a document structure, the page comprising an instruction to instantiate a behavior component, instantiating the behavior component in accordance with the instruction, instantiation of the behavior component creating a document fragment; and maintaining the document fragment separate from the document structure. The Office action has rejected claim 18 under the same rationale as claim 1. Applicants respectfully disagree.

As was shown above, Guthrie does not teach the specific kind of component called a behavior component that may be instantiated in a web page. Thus, Guthrie cannot possibly be construed to teach a behavior component that when instantiated creates a document fragment that is separate from the document structure. Furthermore, claim 18 recites maintaining both a document fragment and a document structure, neither of which are disclosed by Guthrie as Guthrie teaches that a single web page is simply passed on to a browser for rendering. For at least these reasons, applicants submit that claim 18 is allowable over the prior art of record.

With regard to claims 19-23, these claims depend either directly or indirectly from claim 18. Applicants submit that claims 19-23 are also allowable for the additional patentable elements included in these claims.

Claim 24 recites a computer-readable medium having computer-executable instructions, comprising linking an element placed in a page to a behavior component, the behavior component including content therein, interpreting the page to form a document structure, when interpreting the element, instantiating the behavior component to determine a behavior of the element on the page, the behavior including a pointer to the content, instantiating the behavior component to create a document fragment, the document fragment maintained separately from the document structure, accessing the content via the pointer, and inserting the content into a representation of the page. The Office action rejected claim 24 as being anticipated by Guthrie. Column 5 lines 14-18, 26-29 and 33-34 and column 6, line 25 to column 7, line 19 are referenced. Applicants respectfully disagree.

Again, as was shown above, Guthrie does not teach the specific kind of component called a behavior component that may be instantiated in a web page. Thus, Guthrie cannot possibly be construed to teach a behavior component that when instantiated creates a document fragment that is separate from the document structure. Furthermore, claim 24 recites accessing the content via the pointer, and inserting the content into a representation of the page, neither of which are disclosed by Guthrie as Guthrie teaches that a single web page is simply passed on to a browser for rendering. For at least these reasons, applicants submit that claim 24 is allowable over the prior art of record.

Claim 25 recites a computer-readable medium having computer-executable components comprising a behavior component, an import instruction component in a page, the import instruction configured to call for instantiation of the behavior component during a parsing of the page and further configured to associate the behavior component with the page, and an element in the page that is defined by a behavior of the behavior component and configured such that, during the parsing of the page, the element binds with the behavior component and applies the behavior. The Office rejected claim 25 as being anticipated by Guthrie. Column 5 lines 14-18, 26-29 and 33-34 and column 8, lines 9-34 are referenced. Applicants respectfully disagree.

As was shown above, Guthrie does not teach the specific kind of component called a behavior component that may be instantiated in a web page. Thus, Guthrie cannot possibly be construed to teach that, during the parsing of the page, the element binds with the behavior component and applies the behavior. At best, Guthrie may teach that during parsing, the behavior is attached to the elements but this would require interpreting the injectable component described in Guthrie to be construed as a conventional behavior component. This still falls short of the behavior component of the present invention that is operable to be bound to an element. For at least these reasons, applicants submit that claim 25 is allowable over the prior art of record.

With regard to claims 26-28, these claims depend either directly or indirectly from claim 25. Applicants submit that claims 26-28 are also allowable for the additional patentable elements included in these claims.

Claim 29 recites a computer-readable medium having computer-executable instructions comprising interpreting a page, the page comprising an instantiation instruction that calls for instantiation of a behavior component, the behavior component comprising a parsing instruction, and instantiating the behavior component in accordance with the instantiation instruction, the instantiation precluded by the parsing instruction from parsing static content in the behavior component. The Office rejected claim 29 as being anticipated by Guthrie. Column 5 lines 14-18, 26-29 and 33-34 and column 8, lines 9-34 are referenced. Applicants respectfully disagree.

Guthrie does not teach the specific kind of component called a behavior component that may be instantiated in a web page. Thus, Guthrie cannot possibly be construed to teach a page comprising an instantiation instruction that calls for instantiation of a behavior component. At best, Guthrie may teach that during parsing, the behavior is attached to the elements but this would require interpreting the injectable component described in Guthrie to be construed as a conventional behavior component. This still falls short of the behavior component of the present invention that is operable to be bound to an element. For at least these reasons, applicants submit that claim 29 is allowable over the prior art of record.

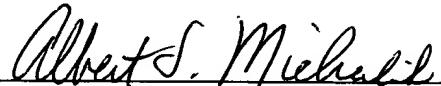
For at least these additional reasons, applicants submit that all the claims are patentable over the prior art of record. Reconsideration and withdrawal of the rejections in the Office Action is respectfully requested and early allowance of this application is earnestly solicited.

CONCLUSION

In view of the foregoing remarks, it is respectfully submitted that claims 1-29 are patentable over the prior art of record, and that the application is good and proper form for allowance. A favorable action on the part of the Examiner is earnestly solicited.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is invited to call the undersigned attorney at (425) 836-3030.

Respectfully submitted,



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